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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,847	10/11/2001	Toshiyuki Kasai	110837	9089

25944 7590 07/16/2003

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EXAMINER

ALPHONSE, FRITZ

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 07/16/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,847

Applicant(s)

KASAI, TOSHIYUKI

Examiner

Fritz Alphonse

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 11 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Okuda (U.S. Pat. No. 6,380,689).

As to claims 1, 2, Okuda (figs. 2, 5, 6) show a driving circuit for actively driving an organic electroluminescent display device (col. 1, lines 6-9) in which a plurality of pixels (note that the panel has a plurality of pixel elements $10_{i,j}$; see figure 6), each containing an organic electroluminescent element (E_i), are arranged in a matrix (col. 3, lines 31-34), the driving circuit comprising: a reverse-bias setting circuit (see figure 6) which sets the organic electroluminescent elements to a reverse-bias state on an area-by-area basis (col. 5, lines 11-24).

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As to claims 3-4 and 13-14, Okuda (fig. 6) discloses a driving circuit, wherein the reverse-bias setting circuit including a switch (6_D) which switches an electrical connection state of at least one of electrodes of each of the organic electroluminescent elements between being connected to a first power source line (V_a) that supplies a first potential and being connected to a second power source line ($-V_e$) that supplies a second potential that is lower in level than the first potential.

As to claims 5-6 and 15-16, Okuda (fig. 6) discloses a driving circuit, wherein the switches being arranged with one switch for each pixel, so that the organic electroluminescent elements being set to be in a reverse-bias state on a pixel-by-pixel basis by controlling the switches (note in figures 5, 6, switches (6_D) are arranged for each pixel elements $10_{i,j}$, and the reverse bias voltage is applied to each EL device; see abstract).

As to claims 7-8 and 17-18, the claims have substantially the limitations of claims 5-6, therefore, they are analyzed as previously discussed in claims 5-6 above.

As to claim 9, Okuda (figs. 2, 5, 6) show a driving circuit for driving an electro-optical device in which a plurality of electro-optical elements are arranged in a matrix, the driving circuit comprising: a reverse-bias setting circuit (see figure 6) which sets at least one of the electro-optical elements to a reverse-bias state (col. 5, lines 11-24).

As to claim 10, the claim differs from claim 1 by the additional limitation “ a piece of electronic equipment, comprising: an active-matrix display device”. However, this limitation is clearly disclosed by Okuda (see abstract).

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As to claims 11 and 12, the claims have substantially the limitations of claims 1 and 2, therefore, they are analyzed as previously discussed in claims 1 and 2 above.

As to claim 19, Okuda (figs. 2, 5, 6) show an electro-optical device, comprising: a plurality of electro-optical elements (note that the panel has a plurality of pixel elements $10_{i,j}$; see figure 6); and a driving circuit (see figure 6) that drives the plurality of electro-optical elements, the driving circuit including a reverse-bias setting circuit which sets at least one of the plurality of electro-optical elements to a reverse-bias state (col. 5, lines 11-24; see abstract).

As to claim 20, Okuda discloses an electro-optical device, wherein the electro-optical element being an organic electroluminescent element (col. 1, lines 6-9).

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okuda et al. (U.S. Pat. No. 5,844,368) discloses a driving system for driving luminous elements.

Ishizuka et al. (U.S. Pat. No. 5,923,307) discloses a display device using current driven type light emitting elements.

Nagayama et al. (U.S. Pat. No. 5,949,186) discloses an organic electroluminescent element.

Howard et al. (U.S. Pat. No. 6,023,259) discloses an OLED active matrix using a single transistor current mode pixel design.

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Ochi et al. (U.S. Pat. No. 6,376,994) discloses an organic EL device driving apparatus having temperature compensating function.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse whose telephone number is (703) 308-8534.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703) 305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


F. Alphonse

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July 11, 2003


DENNIS-DOON CHOW
PRIMARY EXAMINER